Fig. 1

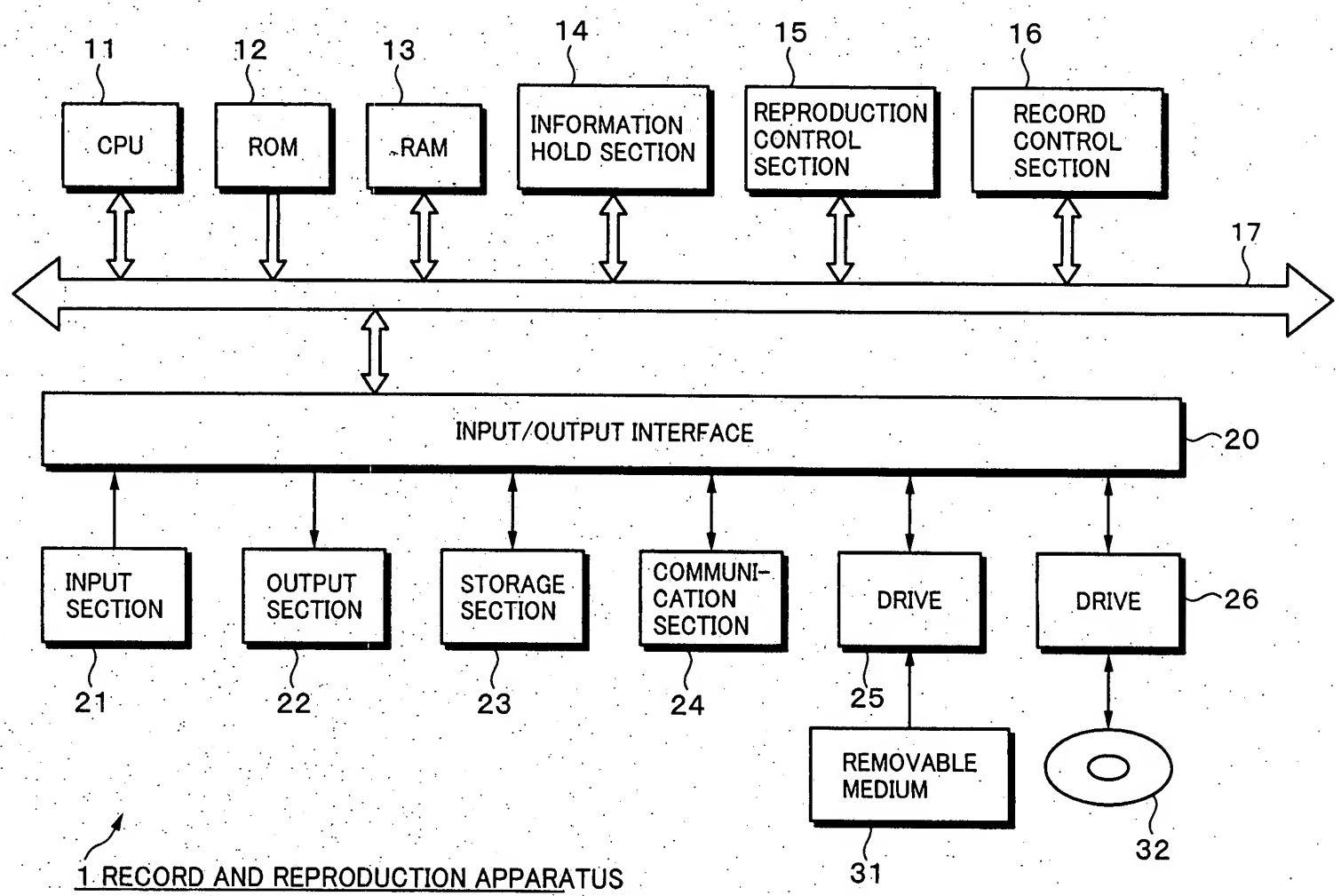

11
12
13
14
15
16
CPU
ROM
RAM
INFORMATION HOLD SECTION
REPRODUCTION CONTROL SECTION
RECORD CONTROL SECTION
17
INPUT/OUTPUT INTERFACE
20
INPUT SECTION
OUTPUT SECTION
STORAGE SECTION
COMMUNI-CATION SECTION
DRIVE
DRIVE
26
21
22
23
24
25
REMOVABLE MEDIUM
31
32
1 RECORD AND REPRODUCTION APPARATUS

Fig. 2

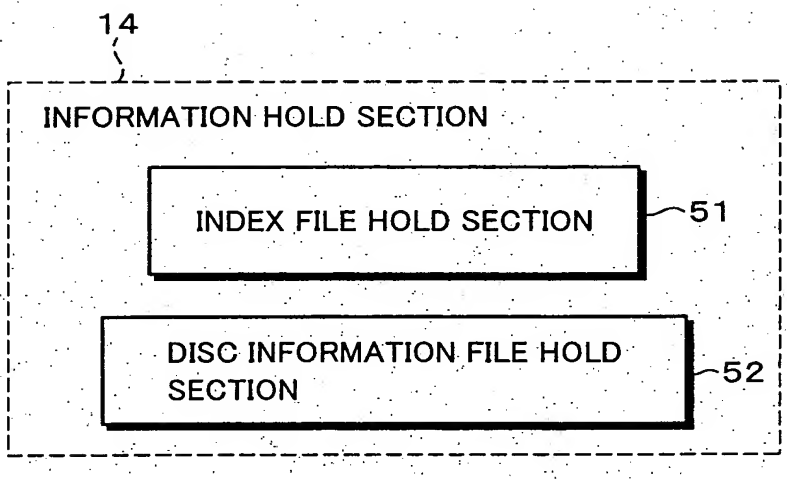

14
INFORMATION HOLD SECTION
INDEX FILE HOLD SECTION
51
DISC INFORMATION FILE HOLD SECTION
52

Fig. 3

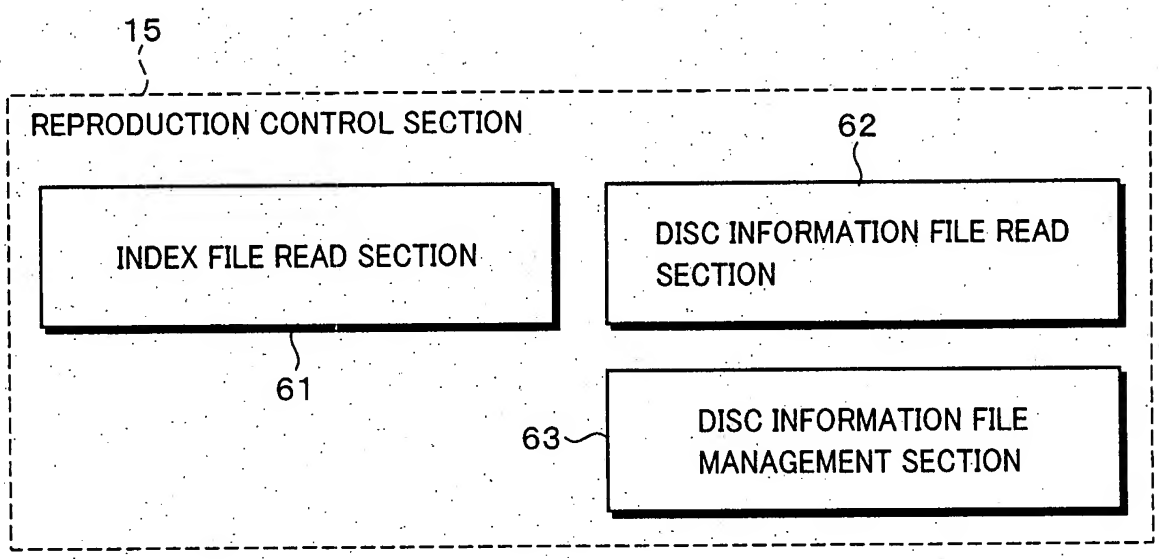

15
REPRODUCTION CONTROL SECTION
62
INDEX FILE READ SECTION
DISC INFORMATION FILE READ SECTION
61
63
DISC INFORMATION FILE MANAGEMENT SECTION

Fig. 4

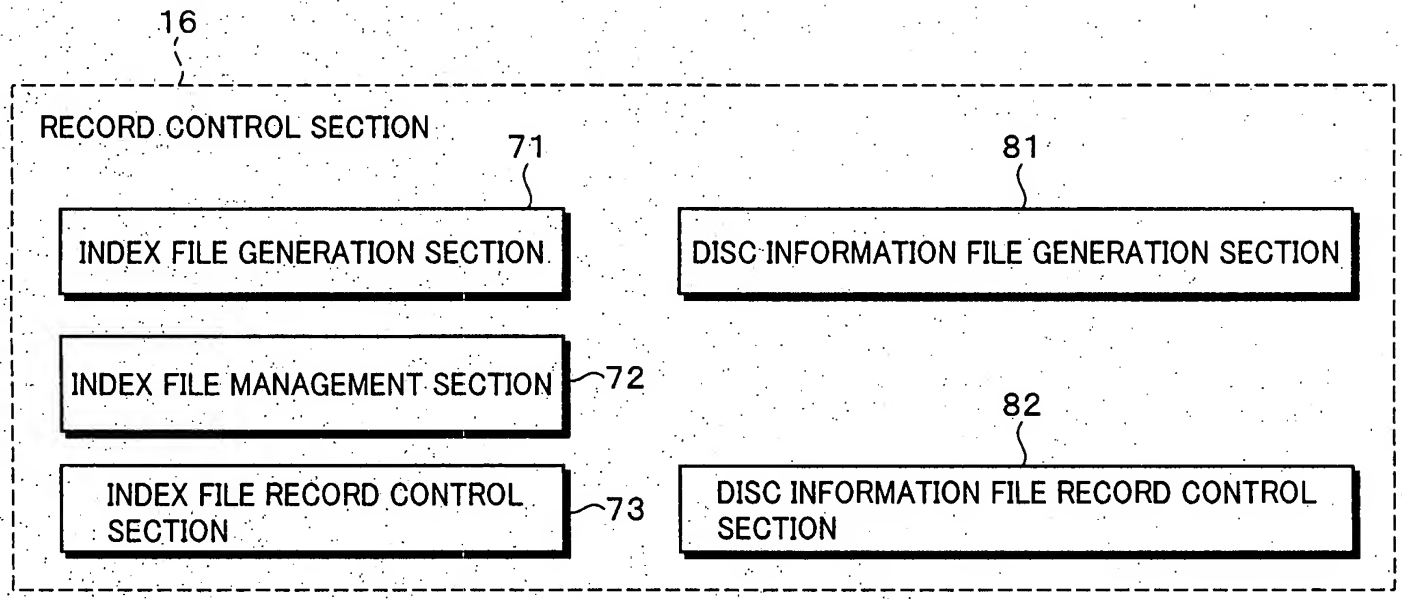

16
RECORD CONTROL SECTION
71
INDEX FILE GENERATION SECTION
INDEX FILE MANAGEMENT SECTION
72
INDEX FILE RECORD CONTROL SECTION
73
81
DISC INFORMATION FILE GENERATION SECTION
82
DISC INFORMATION FILE RECORD CONTROL SECTION

Fig. 5

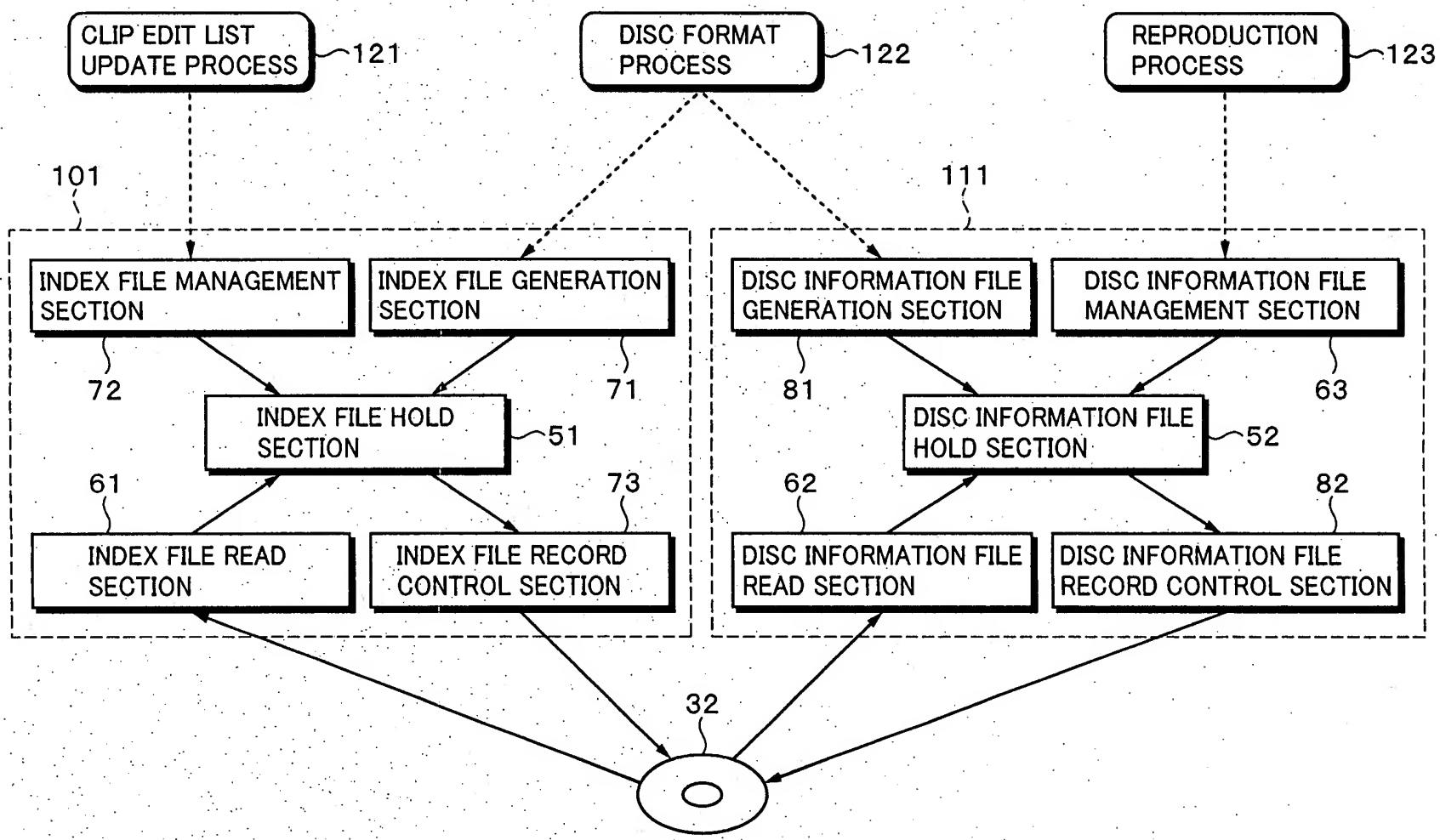

CLIP EDIT LIST UPDATE PROCESS
121
DISC FORMAT PROCESS
122
REPRODUCTION PROCESS
123
101
111
INDEX FILE MANAGEMENT SECTION
INDEX FILE GENERATION SECTION
DISC INFORMATION FILE GENERATION SECTION
DISC INFORMATION FILE MANAGEMENT SECTION
72
71
81
63
INDEX FILE HOLD SECTION
51
DISC INFORMATION FILE HOLD SECTION
52
61
73
62
82
INDEX FILE READ SECTION
INDEX FILE RECORD CONTROL SECTION
DISC INFORMATION FILE READ SECTION
DISC INFORMATION FILE RECORD CONTROL SECTION
32

Fig. 6

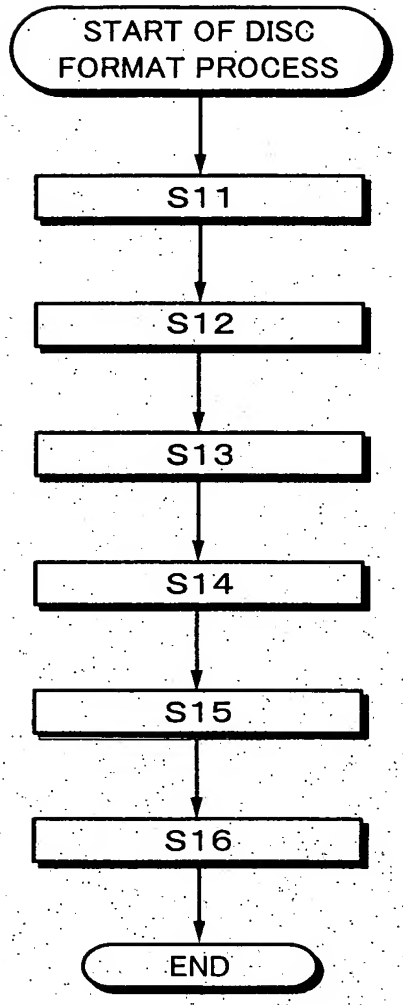


Fig. 7

```
1  <?xml version="1.0" encoding="UTF-8"?>
2  <indexFile xmlns="urn:schemas-professionalDisc:index"
3      indexId="0123456789ABCDEF0123456789ABCDEF">
4      <clipTable path="/PROAV/CLPR/">
5          <!-- Normal Clip -->
6          <clip id="C0001" umid="0D1213000000000000010444444484EEEE00E0188E130B"
7              file="C0001C01.SMI" fps="59.94i" dur="12001" ch="4" aspectRatio="4:3">
8              <video umid="0D1213000000000000010444444484EEEE00E0188E130B"
9                  file="C0001V01.MXF" type="DV25_411" header="65536"/>
10             <audio umid="0D1213000000000000010444444484EEEE00E0188E130B"
11                 file="C0001A01.MXF" type="LPCM16" header="65536" trackDst="CH1"/>
12             <audio umid="0D1213000000000000010444444484EEEE00E0188E130B"
13                 file="C0001A02.MXF" type="LPCM16" header="65536" trackDst="CH2"/>
14             <audio umid="0D1213000000000000010444444484EEEE00E0188E130B"
15                 file="C0001A03.MXF" type="LPCM16" header="65536" trackDst="CH3"/>
16             <audio umid="0D1213000000000000010444444484EEEE00E0188E130B"
17                 file="C0001A04.MXF" type="LPCM16" header="65536" trackDst="CH4"/>
18             <subStream umid="0D1213000000000000010444444484EEEE00E0188E130B"
19                 file="C0001S01.MXF" type="PD-SubStream" header="65536"/>
20             <meta file="C0001M01.XML" type="PD-Meta"/>
21             <meta file="C0001M02.TXT" type="key:0123456789ABCDEF"/>
22             <rtmeta file="C0001R01.BIM" type="std2k" header="65536"/>
23         </clip>
24         <!-- Partial Deleted Clip -->
25         <clip id="C0002" umid="0D1213000000000000010444444484EEEE00E0188E130B"
26             file="C0002C01.SMI" fps="59.94i" dur="4000" ch="4" aspectRatio="4:3">
27             <video umid="0D1213000000000000010444444484EEEE00E0188E130B"
28                 file="C0002V01.MXF" type="IMX50" header="80000"/>
29             <audio umid="0D1213000000000000010444444484EEEE00E0188E130B"
```

Fig. 8

```
1                   file="C0002A01.MXF" type="LPCM16" header="100000" trackDst="CH1"/>
2                 <audio umid="0D12130000000000001044444484EEEE00E0188E130B"
3                   file="C0002A02.MXF" type="LPCM16" header="100000" trackDst="CH2"/>
4                 <audio umid="0D12130000000000001044444484EEEE00E0188E130B"
5                   file="C0002A03.MXF" type="LPCM16" header="100000" trackDst="CH3"/>
6                 <audio umid="0D12130000000000001044444484EEEE00E0188E130B"
7                   file="C0002A04.MXF" type="LPCM16" header="100000" trackDst="CH4"/>
8                 <subStream umid="0D12130000000000001044444484EEEE00E0188E130B"
9                   file="C0002S01.MXF" type="PD-SubStream" header="90000"
10                  clipBegin="8"/>
11                <meta file="C0002M01.XML" type="PD-Meta"/>
12                <rtmeta file="C0002R01.BIM" type="std2k" header="70000"/>
13              </clip>
14              <!-- Refered Clip -->
15              <clip id="C0003" umid="0D12130000000000001044444484EEEE00E0188E130B"
16                file="C0003C01.SMI" fps="59.94i" dur="100000" ch="4" aspectRatio="4:3"
17                referer="E0001 E0002 E0003">
18                <video umid="0D12130000000000001044444484EEEE00E0188E130B"
19                  file="C0003V01.MXF" type="IMX50" header="65536"/>
20                <audio umid="0D12130000000000001044444484EEEE00E0188E130B"
21                  file="C0003A01.MXF" type="LPCM16" header="65536" trackDst="CH1"/>
22                <audio umid="0D12130000000000001044444484EEEE00E0188E130B"
23                  file="C0003A02.MXF" type="LPCM16" header="65536" trackDst="CH2"/>
24                <audio umid="0D12130000000000001044444484EEEE00E0188E130B"
25                  file="C0003A03.MXF" type="LPCM16" header="65536" trackDst="CH3"/>
26                <audio umid="0D12130000000000001044444484EEEE00E0188E130B"
27                  file="C0003A04.MXF" type="LPCM16" header="65536" trackDst="CH4"/>
28                <subStream umid="0D12130000000000001044444484EEEE00E0188E130B"
29                  file="C0003S01.MXF" type="PD-SubStream" header="65536"/>
```

Fig. 9

```
1           <meta file="C0003M01.XML" type="PD-Meta"/>
2           <rtmeta file="C0003R01.BIM" type="std2k" header="65536"/>
3       </clip>
4       <!-- Long GOP -->
5       <clip id="C0004" umid="0D12130000000000001044444484EEEE00E0188E130B"
6           file="C0004C01.SMI" fps="59.94i" dur="12001" ch="4" aspectRatio="16:9"
7           referer="E0004">
8           <video umid="0D12130000000000001044444484EEEE00E0188E130B"
9               file="C0004V01.MXF" type="MPEG2HD25_1440_MP@HL" header="65536"/>
10          <audio umid="0D12130000000000001044444484EEEE00E0188E130B"
11              file="C0004A01.MXF" type="LPCM16" header="65536" trackDst="CH1"/>
12          <audio umid="0D12130000000000001044444484EEEE00E0188E130B"
13              file="C0004A02.MXF" type="LPCM16" header="65536" trackDst="CH2"/>
14          <audio umid="0D12130000000000001044444484EEEE00E0188E130B"
15              file="C0004A03.MXF" type="LPCM16" header="65536" trackDst="CH3"/>
16          <audio umid="0D12130000000000001044444484EEEE00E0188E130B"
17              file="C0004A04.MXF" type="LPCM16" header="65536" trackDst="CH4"/>
18          <subStream umid="0D12130000000000001044444484EEEE00E0188E130B"
19              file="C0004S01.MXF" type="PD-SubStream" header="65536"/>
20          <meta file="C0004M01.XML" type="PD-Meta"/>
21          <meta file="C0004I01.XML" type="PD-PP"/>
22          <rtmeta file="C0004R01.BIM" type="std2k" header="65536"/>
23      </clip>
24  </clipTable>
25  <editlistTable path="/PROAV/EDTR/">
26      <editlist id="E0001" umid="0D12130000000000001044444484EEEE00E0188E130B"
27          file="E0001E01.SMI" dur="500" fps="59.94i" ch="4" aspectRatio="4:3">
28          <meta file="E0001M01.XML" type="PD-Meta"/>
```

Fig. 10

```
        </editlist>
        <editlist id="E0002" umid="0D1213000000000000104444484EEEE00E0188E130B"
            file="E0002E01.SMI" dur="500" fps="59.94i" ch="4" aspectRatio="4:3">
            <meta file="E0002M01.XML" type="PD-Meta"/>
        </editlist>
        <editlist id="E0003" umid="0D1213000000000000104444484EEEE00E0188E130B"
            file="E0003E01.SMI" dur="500" fps="59.94i" ch="4" aspectRatio="4:3">
            <meta file="E0003M01.XML" type="PD-Meta"/>
        </editlist>
        <editlist id="E0004" umid="0D1213000000000000104444484EEEE00E0188E130B"
            file="E0003E01.SMI" dur="500" fps="59.94i" ch="4" aspectRatio="16:9">
            <meta file="E0003M01.XML" type="PD-Meta"/>
            <meta file="E0003I01.XML" type="PD-PP"/>
        </editlist>
    </editlistTable>
</indexFile>
```

Fig. 11

```
1  <?xml version="1.0" encoding="UTF-8"?>
2  <discinfo xmlns="urn:schemas-professionalDisc:discinfo">
3      <history>
4          <clip id="C0003" ftc="smpte-30-drop=00:30:12:23" />
5          <editlist id="E0001" ftc="smpte-30-drop=00:00:00:15" />
6          <tape id="C0003" ftc="smpte-30-drop=00:02:23:12" />
7          <editlist id="E0004" ftc="smpte-30-drop=00:00:10:02" />
8          <clip id="C0002" ftc="smpte-30-drop=00:01:02:03" />
9          <clip id="C0004" ftc="smpte-30-drop=00:05:43:21" />
10     </history>
11 </discinfo>
```

Fig. 12

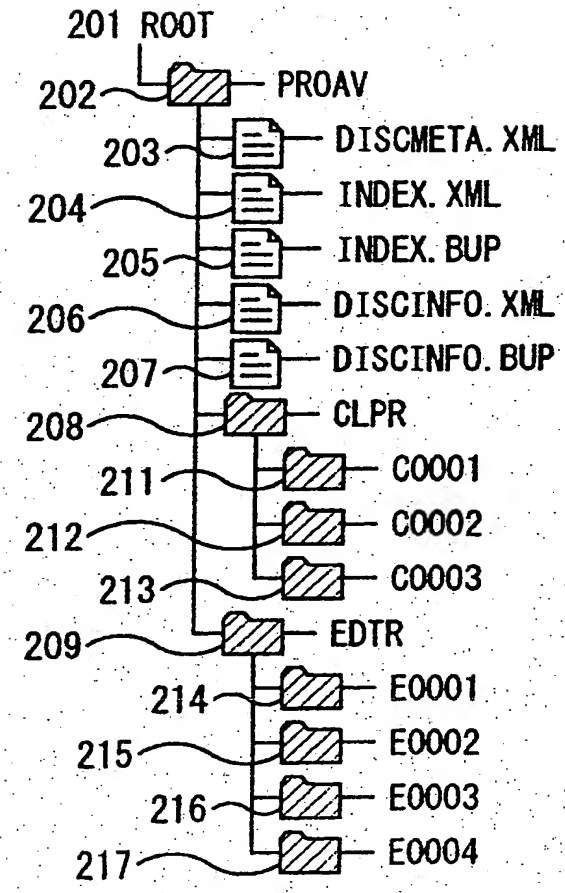

201 ROOT
202
PROAV
203
DISCMETA. XML
204
INDEX. XML
205
INDEX. BUP
206
DISCINFO. XML
207
DISCINFO. BUP
208
CLPR
211
C0001
212
C0002
213
C0003
209
EDTR
214
E0001
215
E0002
216
E0003
217
E0004

Fig. 13

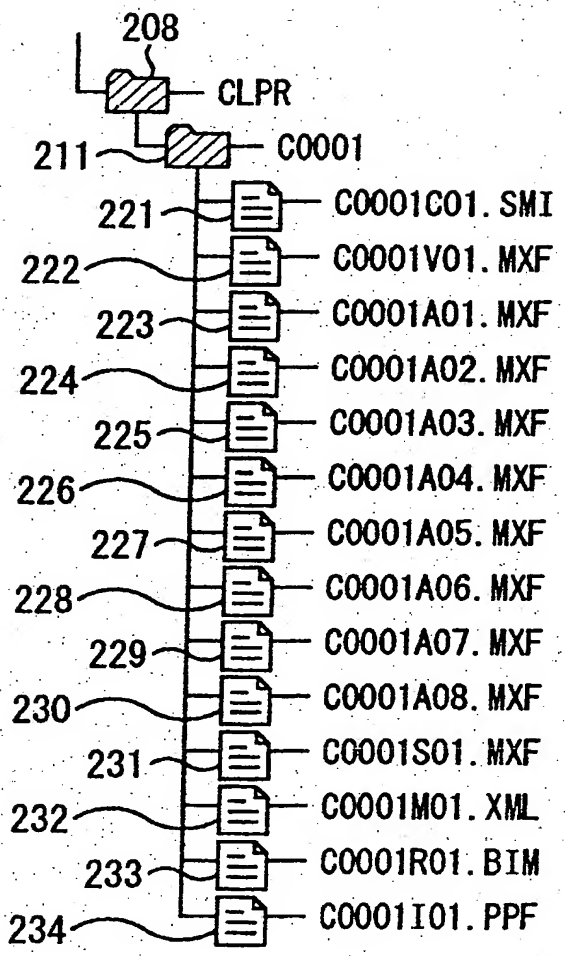

208
CLPR
211
C0001
221
C0001C01.SMI
222
C0001V01.MXF
223
C0001A01.MXF
224
C0001A02.MXF
225
C0001A03.MXF
226
C0001A04.MXF
227
C0001A05.MXF
228
C0001A06.MXF
229
C0001A07.MXF
230
C0001A08.MXF
231
C0001S01.MXF
232
C0001M01.XML
233
C0001R01.BIM
234
C0001I01.PPF

Fig. 14

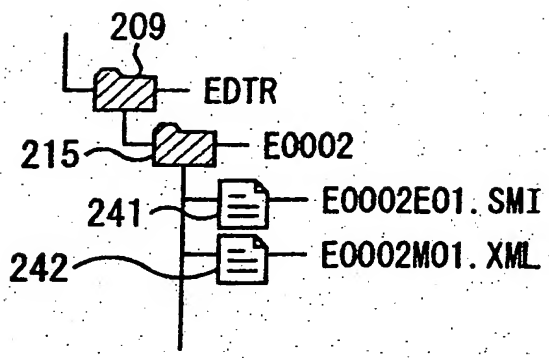


Fig. 15

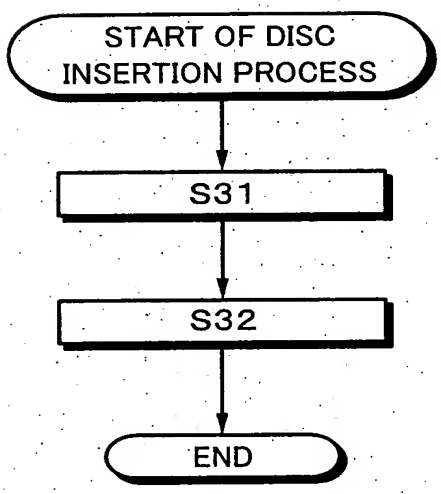


Fig. 16

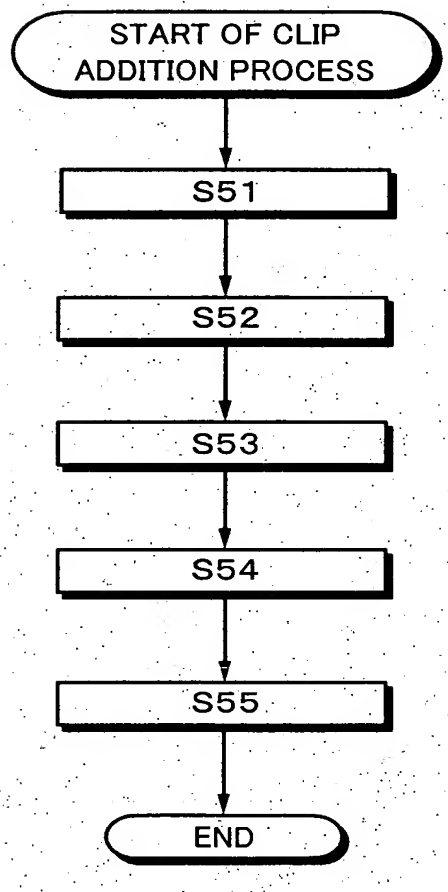


Fig. 17

```
1  <?xml version="1.0" encoding="UTF-8"?>
2  <smil xmlns="urn:schemas-professionalDisc:edl:clipInfo">
3      <head>
4          <metadata type="Meta">
5              <!-- nonrealtime meta -->
6              <NRMeta xmlns="urn:schemas:proDisc:nrt">
7                  <ref src="C0001M01.XML"/>
8              </NRMeta>
9          </metadata>
10     </head>
11     <body>
12         <par>
13             <switch>
14                 <!-- main stream -->
15                 <par systemComponent="IMX50">
16                     <video
17 src="urn:smpte:umid:060A2B340101010501010D1213000000123456789ABCDEF0123456789ABCDEF"
18 type="IMX50"/>
19                     <audio
20 src="urn:smpte:umid:060A2B340101010501010D1213000000123456789ABCDEF0123456789ABCDEF0"
21 type="LPCM16" trackDst="CH1"/>
22                     <audio
23 src="urn:smpte:umid:060A2B340101010501010D1213000000023456789ABCDEF0123456789ABCDEF01"
24 type="LPCM16" trackDst="CH2"/>
25                     <audio
26 src="urn:smpte:umid:060A2B340101010501010D1213000000003456789ABCDEF0123456789ABCDEF012"
27 type="LPCM16" trackDst="CH3"/>
28                     <audio
29 src="urn:smpte:umid:060A2B340101010501010D1213000000456789ABCDEF0123456789ABCDEF0123"
```

Fig. 18

```
1   type="LPCM16" trackDst="CH4"/>
2                       <audio
3   src="urn:smpte:umid:060A2B340101010501010D12130000056789ABCDEF0123456789ABCDEF01234"
4   type="LPCM16" trackDst="CH5"/>
5                       <audio
6   src="urn:smpte:umid:060A2B340101010501010D12130000006789ABCDEF0123456789ABCDEF012345"
7   type="LPCM16" trackDst="CH6"/>
8                       <audio
9   src="urn:smpte:umid:060A2B340101010501010D12130000000789ABCDEF0123456789ABCDEF0123456"
10  type="LPCM16" trackDst="CH7"/>
11                      <audio
12  src="urn:smpte:umid:060A2B340101010501010D12130000000089ABCDEF0123456789ABCDEF01234567"
13  type="LPCM16" trackDst="CH8"/>
14                  </par>
15                  <!-- sub stream -->
16                  <ref
17  src="urn:smpte:umid:060A2B340101010501010D12130000009ABCDEF0123456789ABCDEF012345678"
18  type="SubStream" systemComponent="SubStream"/>
19              </switch>
20              <!-- realtime meta -->
21              <metastream src="C0001R01.BIM" type="required2k"/>
22          </par>
23      </body>
24  </smil>
```

Fig. 19

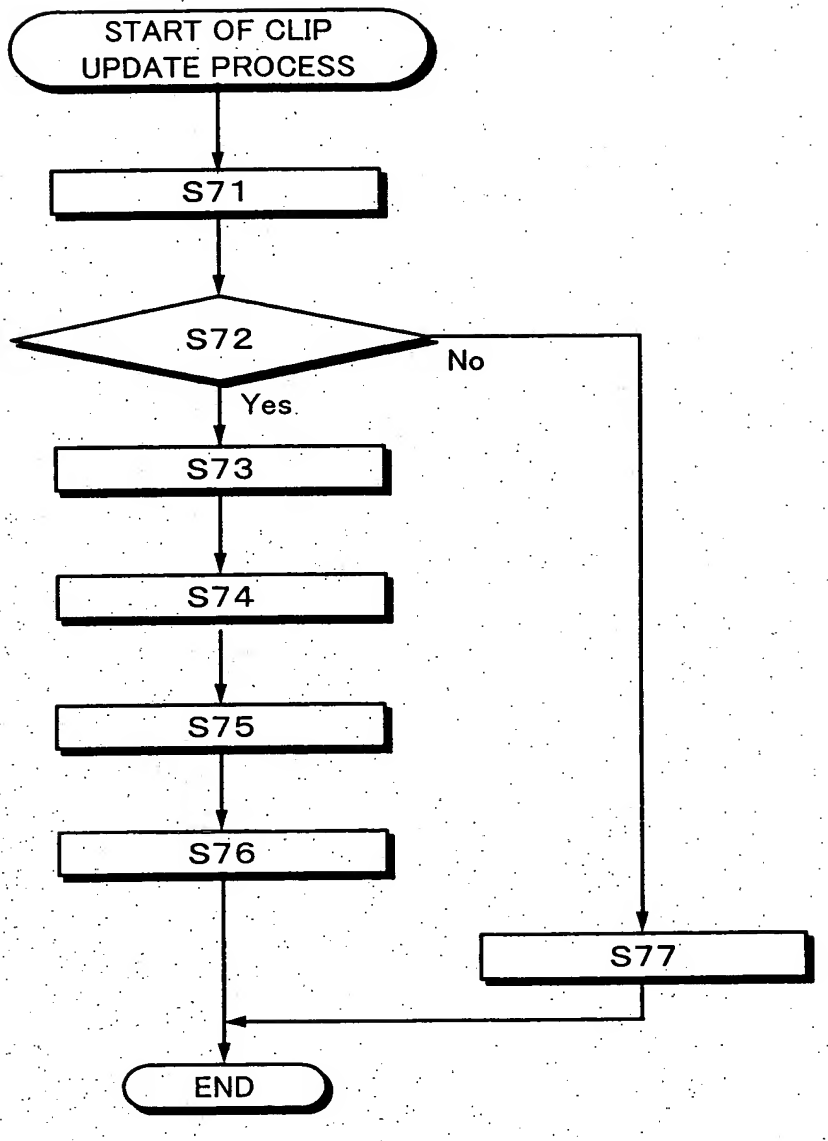

START OF CLIP UPDATE PROCESS
S71
S72
No
Yes
S73
S74
S75
S76
S77
END

Fig. 20

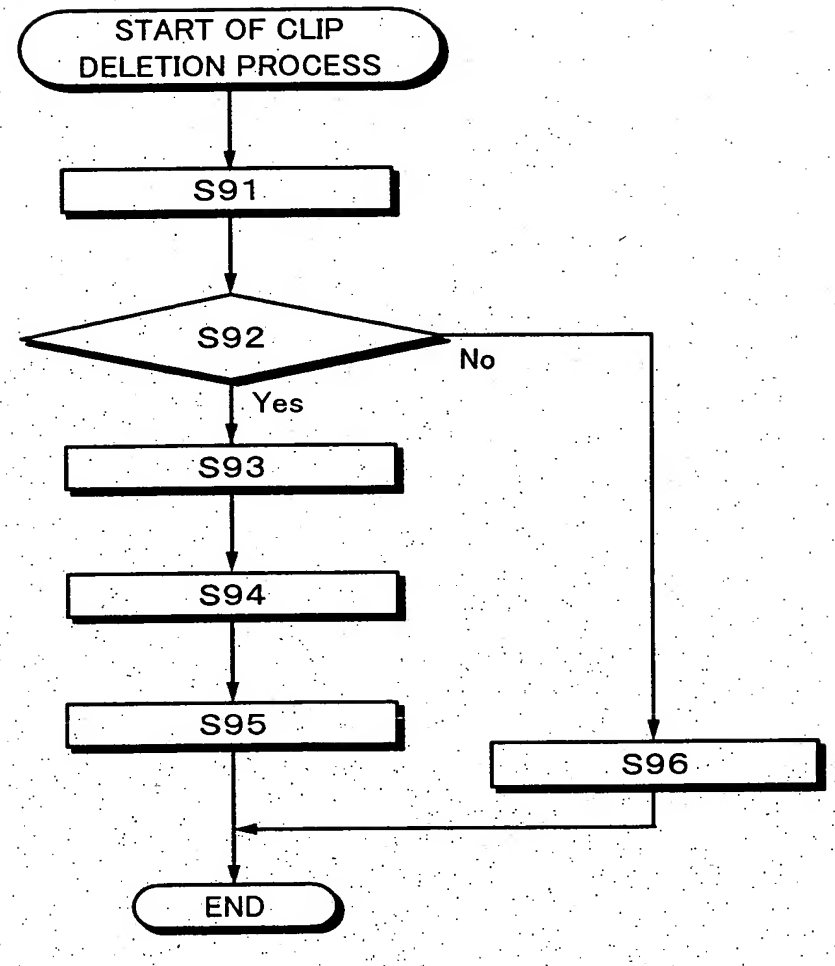

START OF CLIP DELETION PROCESS
S91
S92
No
Yes
S93
S94
S95
S96
END

Fig. 21

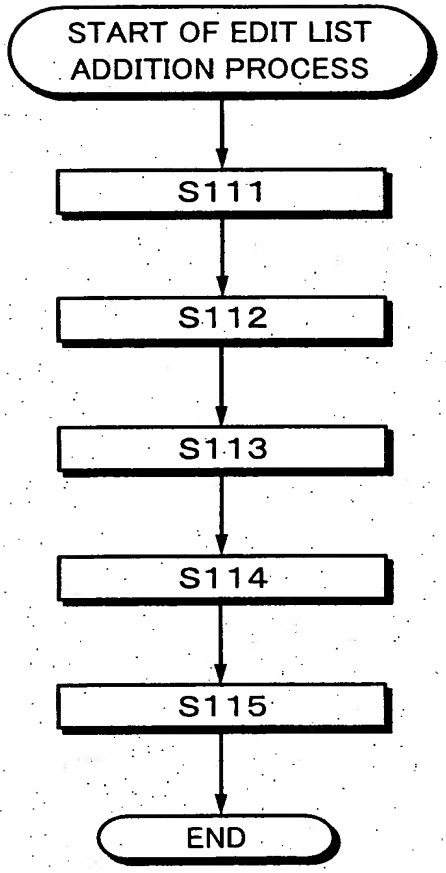

START OF EDIT LIST ADDITION PROCESS
S111
S112
S113
S114
S115
END

Fig. 22

```
1  <?xml version="1.0" encoding="UTF-8"?>
2  <smil xmlns="urn:schemas-professionalDisc:edl:editList">
3      <head>
4          <metadata type="Meta">
5              <!-- nonrealtime meta -->
6              <NRMeta xmlns="urn:schemas:professionalDisc:nrt">
7                  <ref src="E0002M01.XML"/>
8              </NRMeta>
9          </metadata>
10     </head>
11     <body>
12         <par>
13             <!-- Clip1 -->
14             <ref
15 src="urn:smpte:umid:060A2B340101010501010D1213000000FEDCBA9876543210FEDCBA9876543210"
16 type="edlDoc" begin="smpte-30=00:00:00:00" clipBegin="smpte-30=00:00:00:00" clipEnd="smpte-
17 30=00:10:00:00"/>
18             <!-- Clip2 -->
19             <ref
20 src="urn:smpte:umid:060A2B340101010501010D1213000000EDCBA9876543210FEDCBA9876543210F"
21 type="edlDoc" begin="smpte-30=00:10:00:00" clipBegin="smpte-30=00:02:00:00" clipEnd="smpte-
22 30=00:03:30:00"/>
23         </par>
24     </body>
25 </smil>
```

Fig. 23

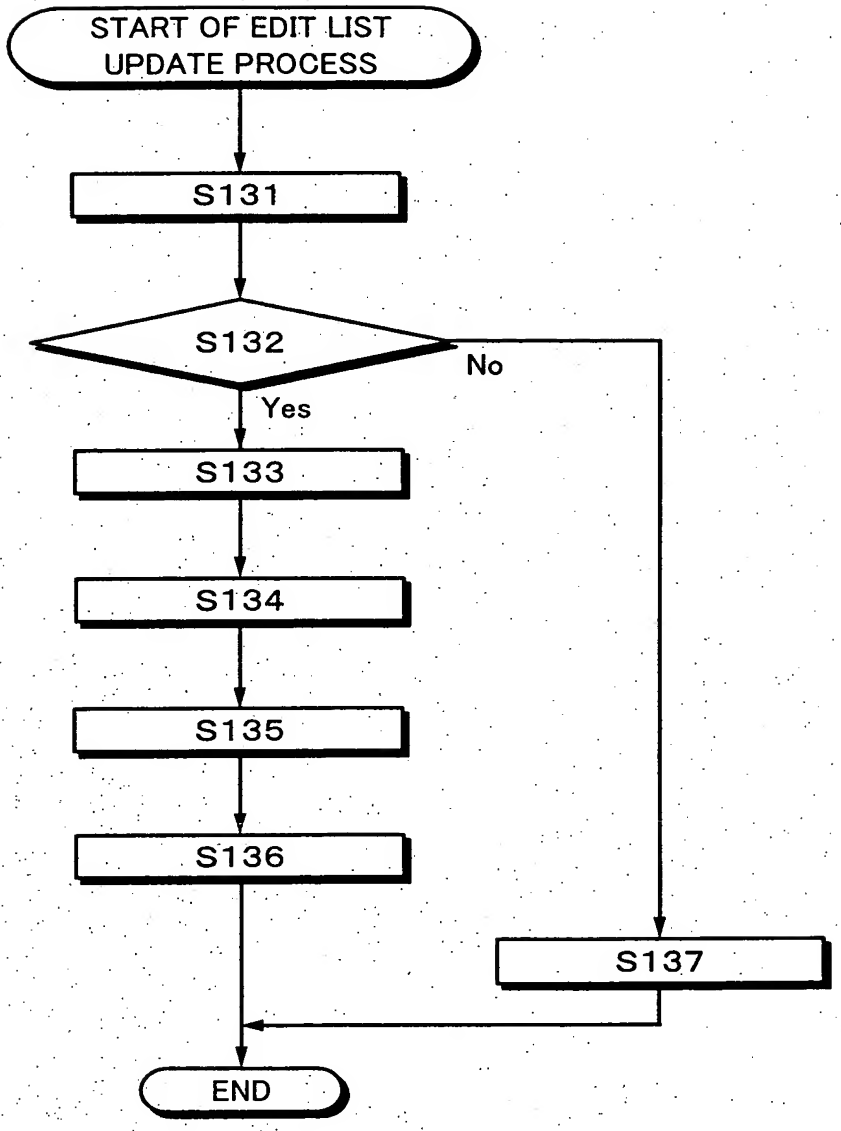

START OF EDIT LIST UPDATE PROCESS
S131
S132
No
Yes
S133
S134
S135
S136
S137
END

Fig. 24

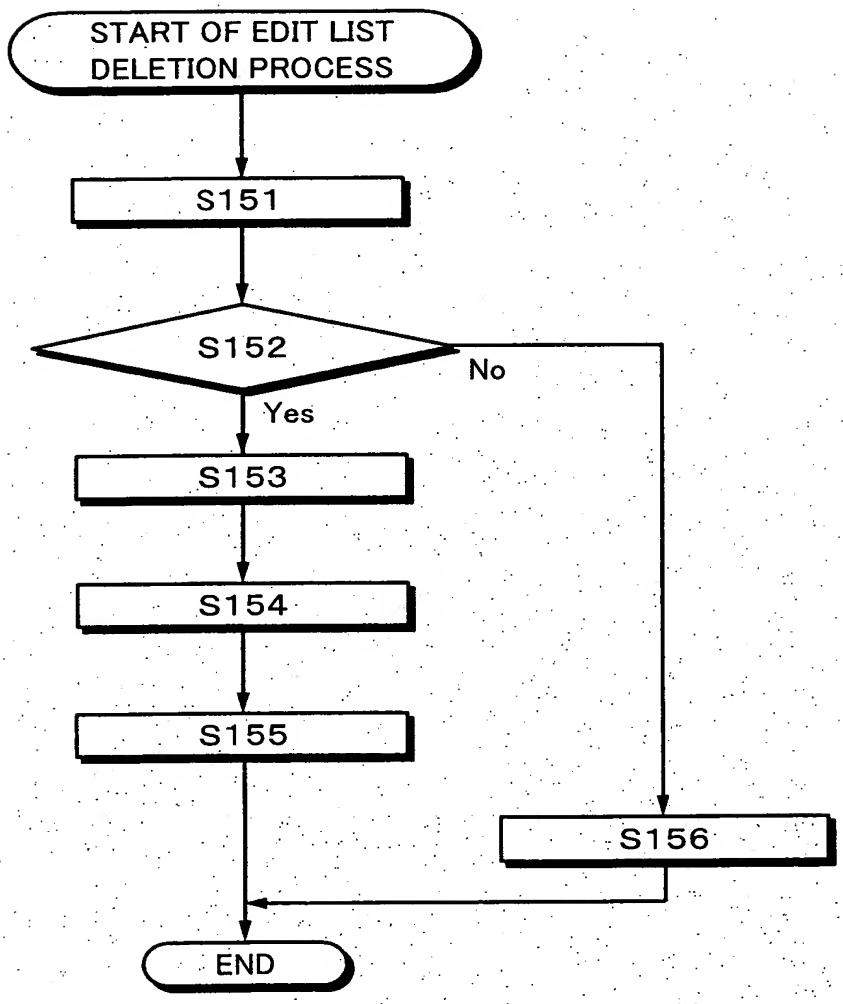

START OF EDIT LIST DELETION PROCESS
S151
S152
No
Yes
S153
S154
S155
S156
END

Fig. 25

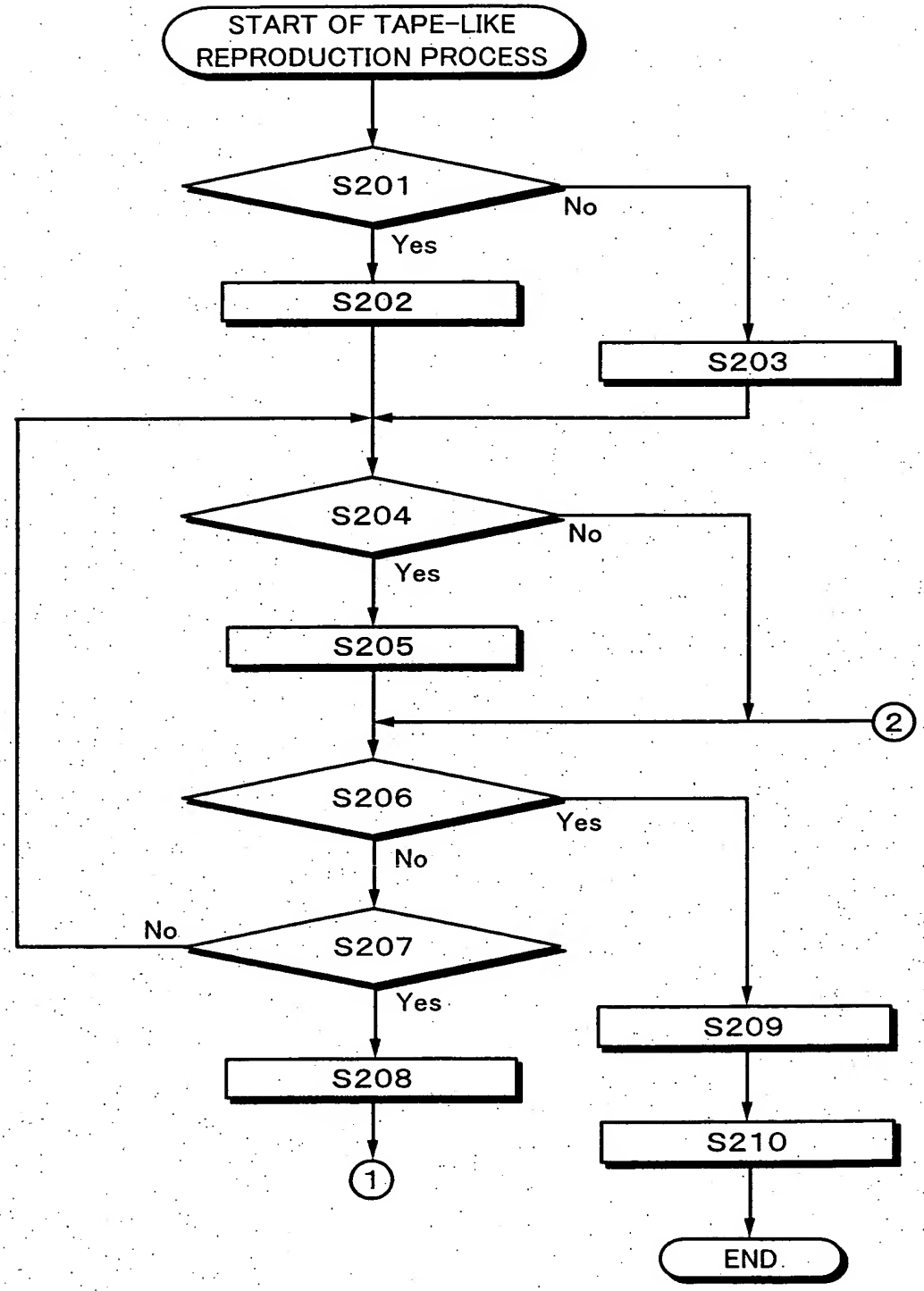

START OF TAPE-LIKE REPRODUCTION PROCESS
S201
No
Yes
S202
S203
S204
No
Yes
S205
2
S206
Yes
No
No
S207
Yes
S208
S209
S210
1
END

Fig. 26

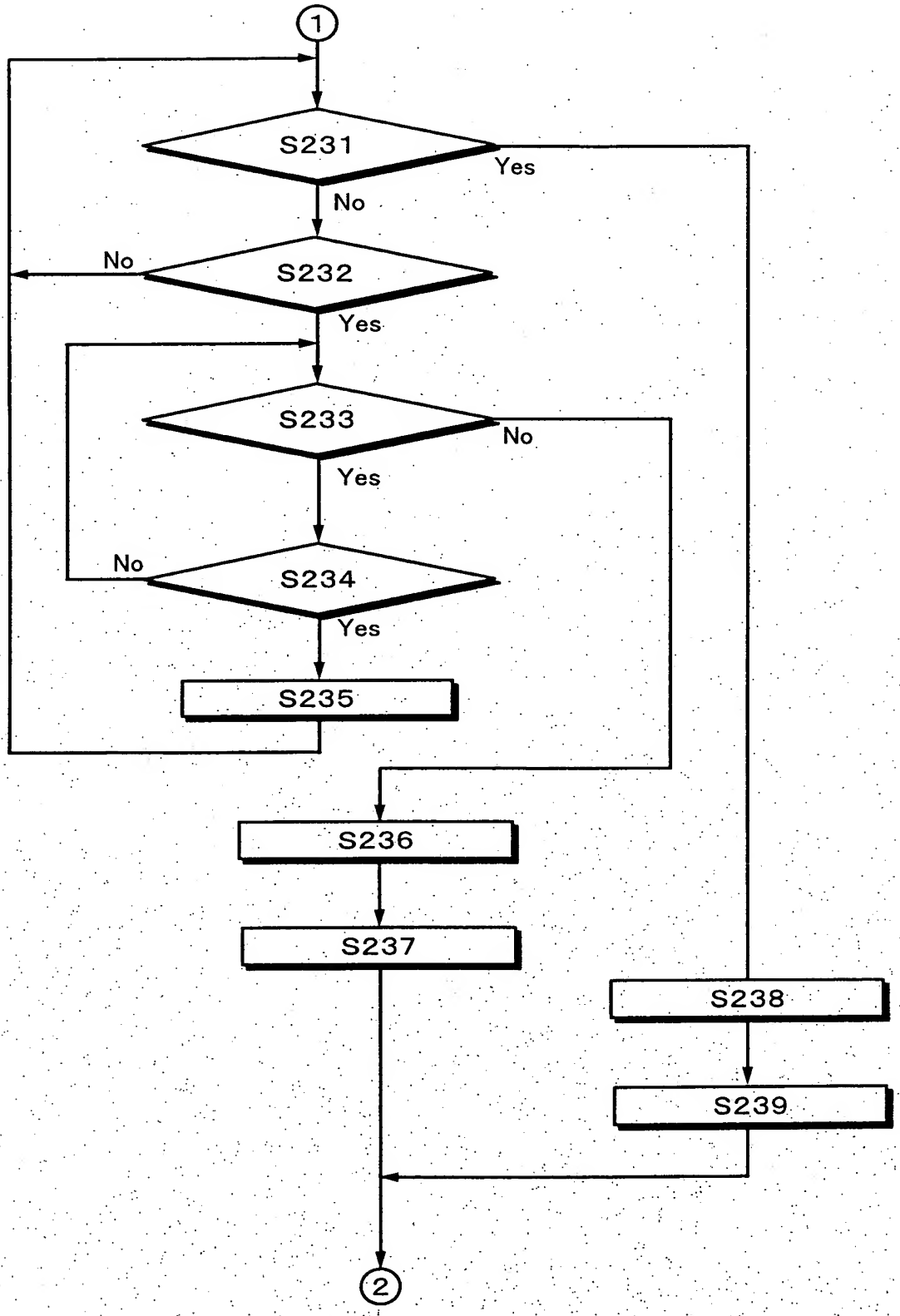

1
S231
Yes
No
No
S232
Yes
S233
No
Yes
No
S234
Yes
S235
S236
S237
S238
S239
2

Fig. 27

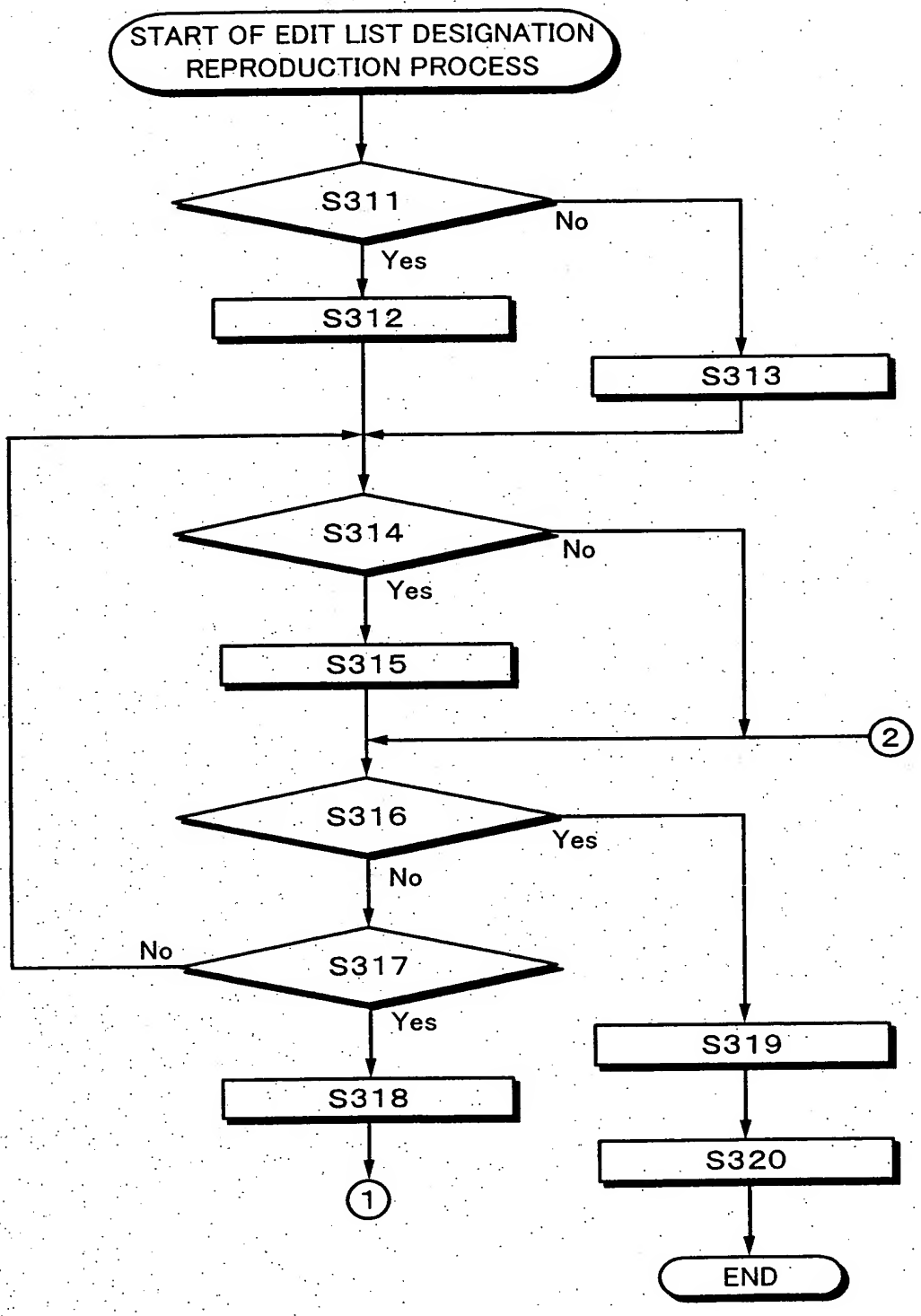

START OF EDIT LIST DESIGNATION REPRODUCTION PROCESS
S311
No
Yes
S312
S313
S314
No
Yes
S315
2
S316
Yes
No
No
S317
Yes
S318
1
S319
S320
END

Fig. 28

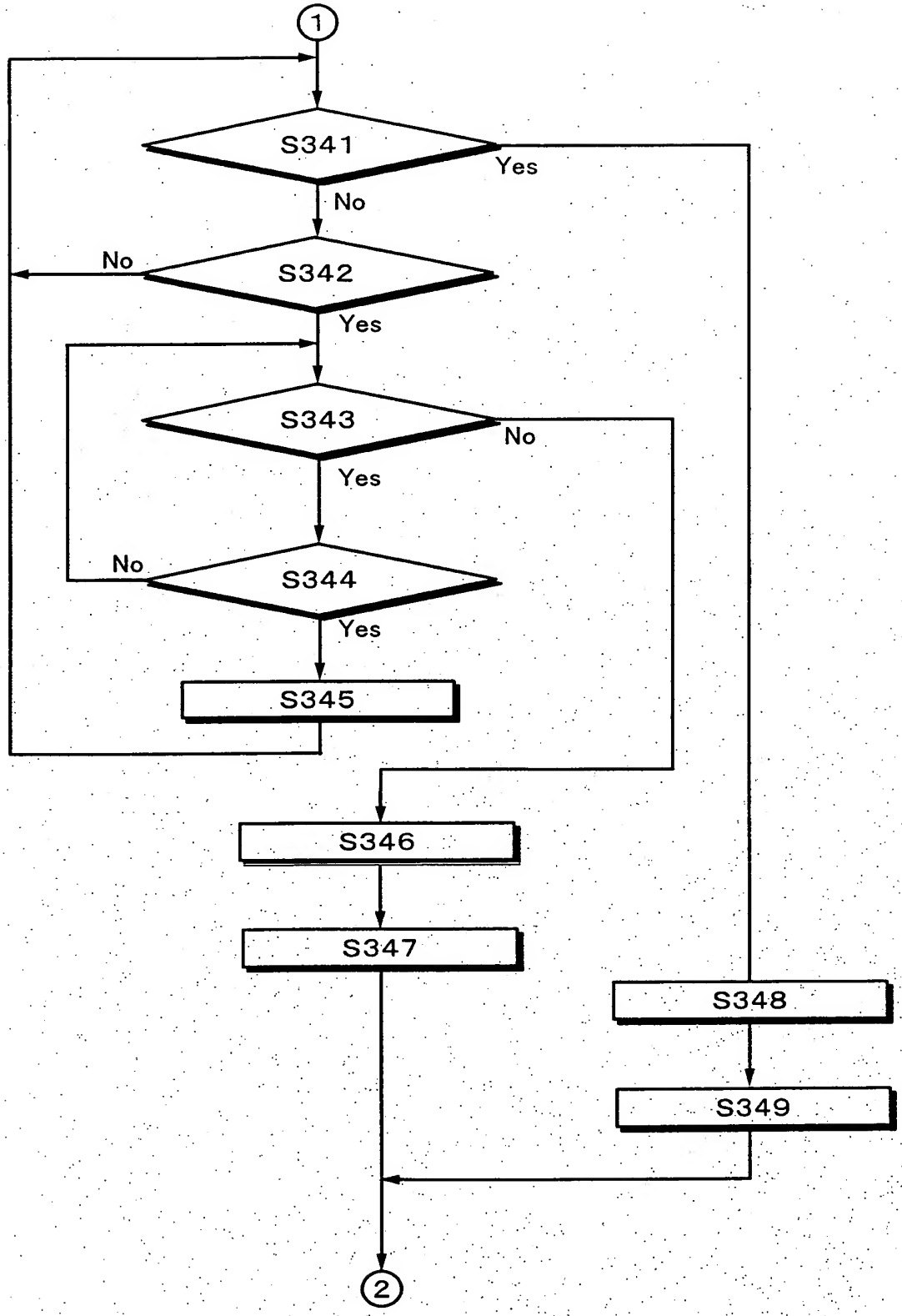

1
S341
Yes
No
No
S342
Yes
S343
No
Yes
No
S344
Yes
S345
S346
S347
S348
S349
2

Fig. 29

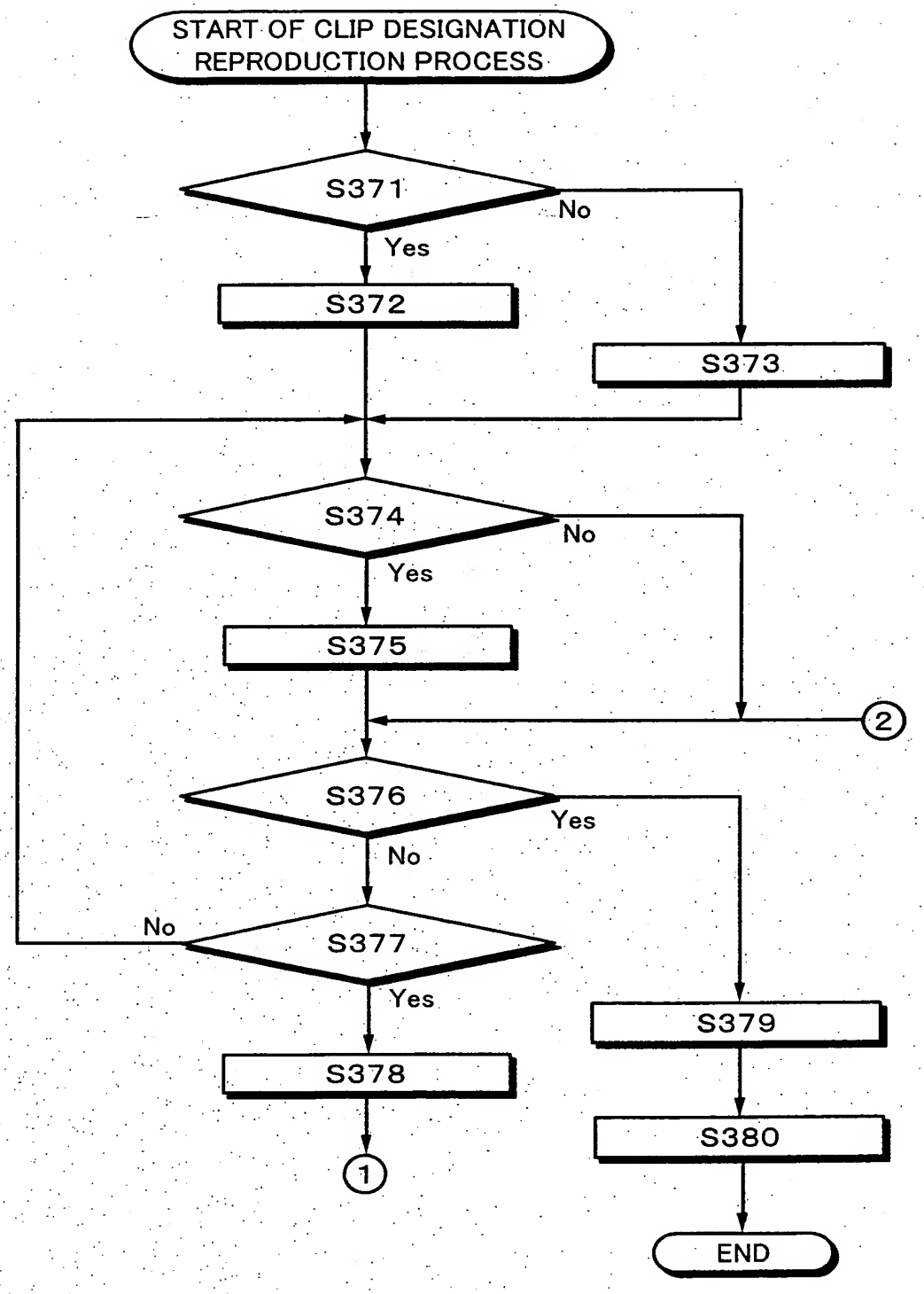

START OF CLIP DESIGNATION REPRODUCTION PROCESS
S371
No
Yes
S372
S373
S374
No
Yes
S375
2
S376
Yes
No
No
S377
Yes
S378
1
S379
S380
END

Fig. 30

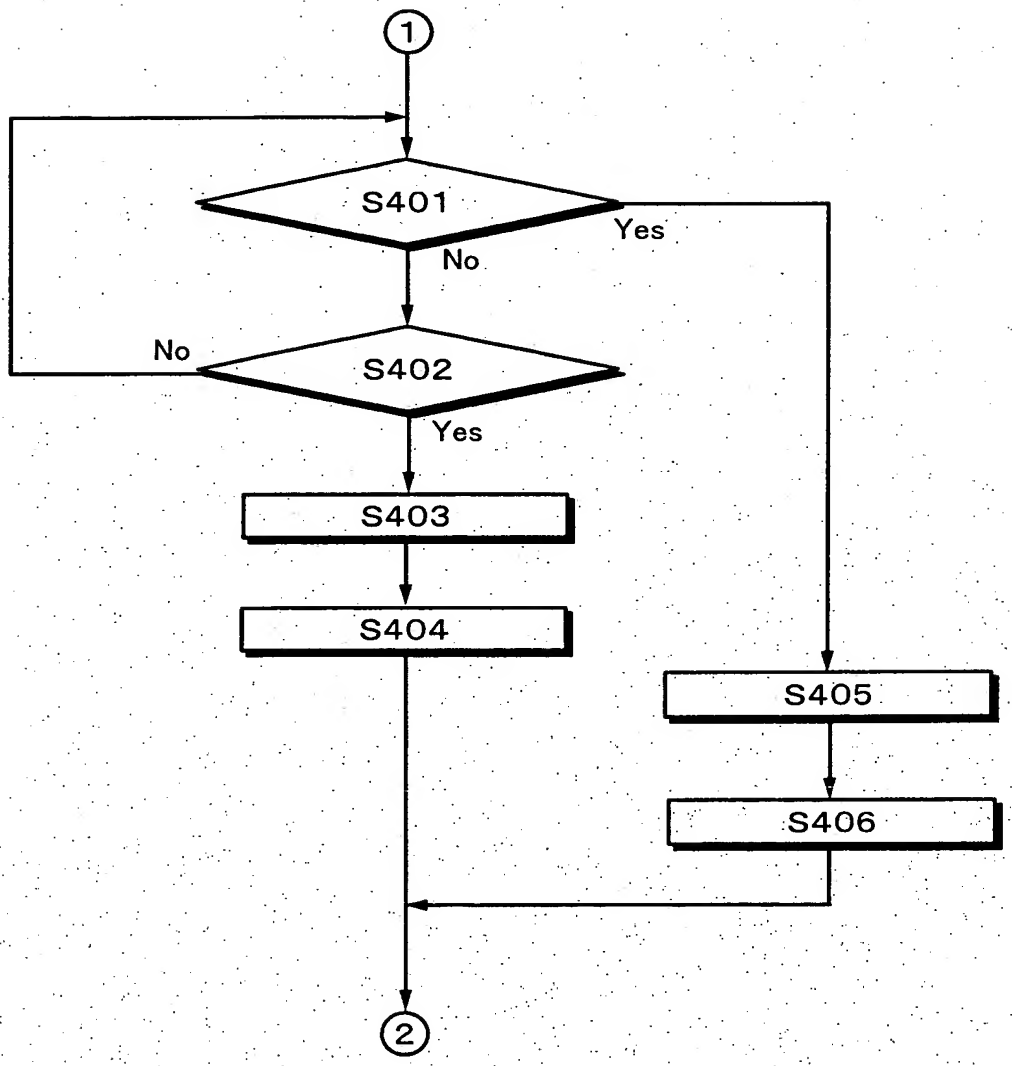


Fig. 31

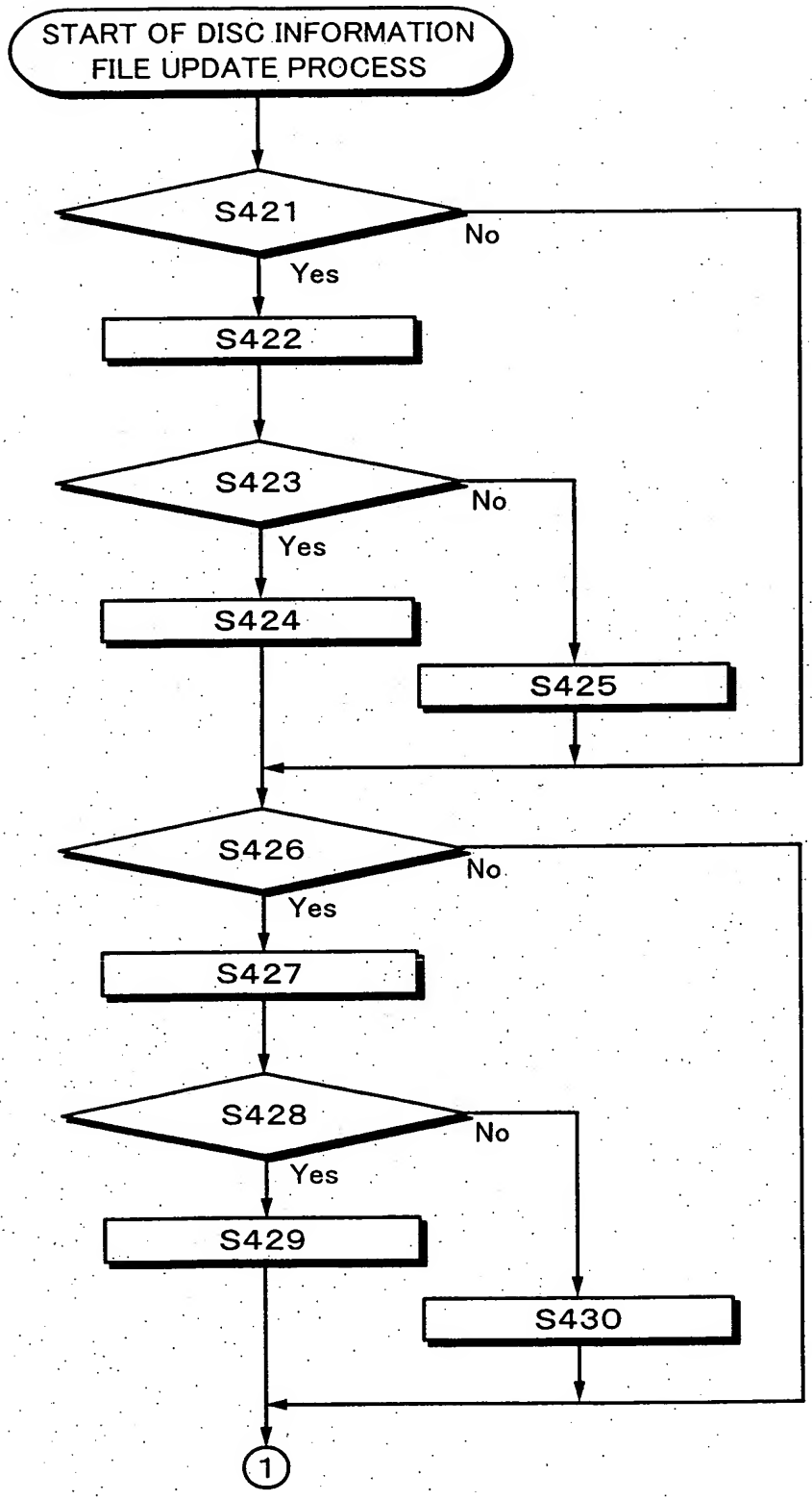

START OF DISC INFORMATION FILE UPDATE PROCESS
S421
No
Yes
S422
S423
No
Yes
S424
S425
S426
No
Yes
S427
S428
No
Yes
S429
S430
1

Fig. 32

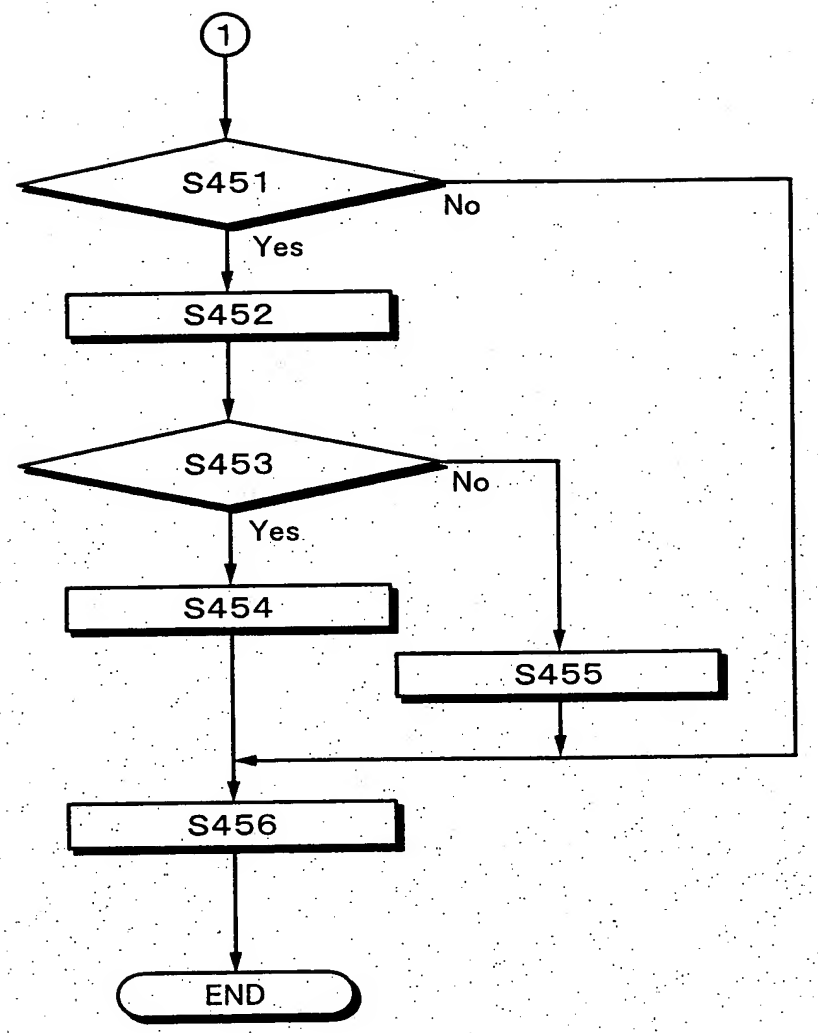


Fig. 33

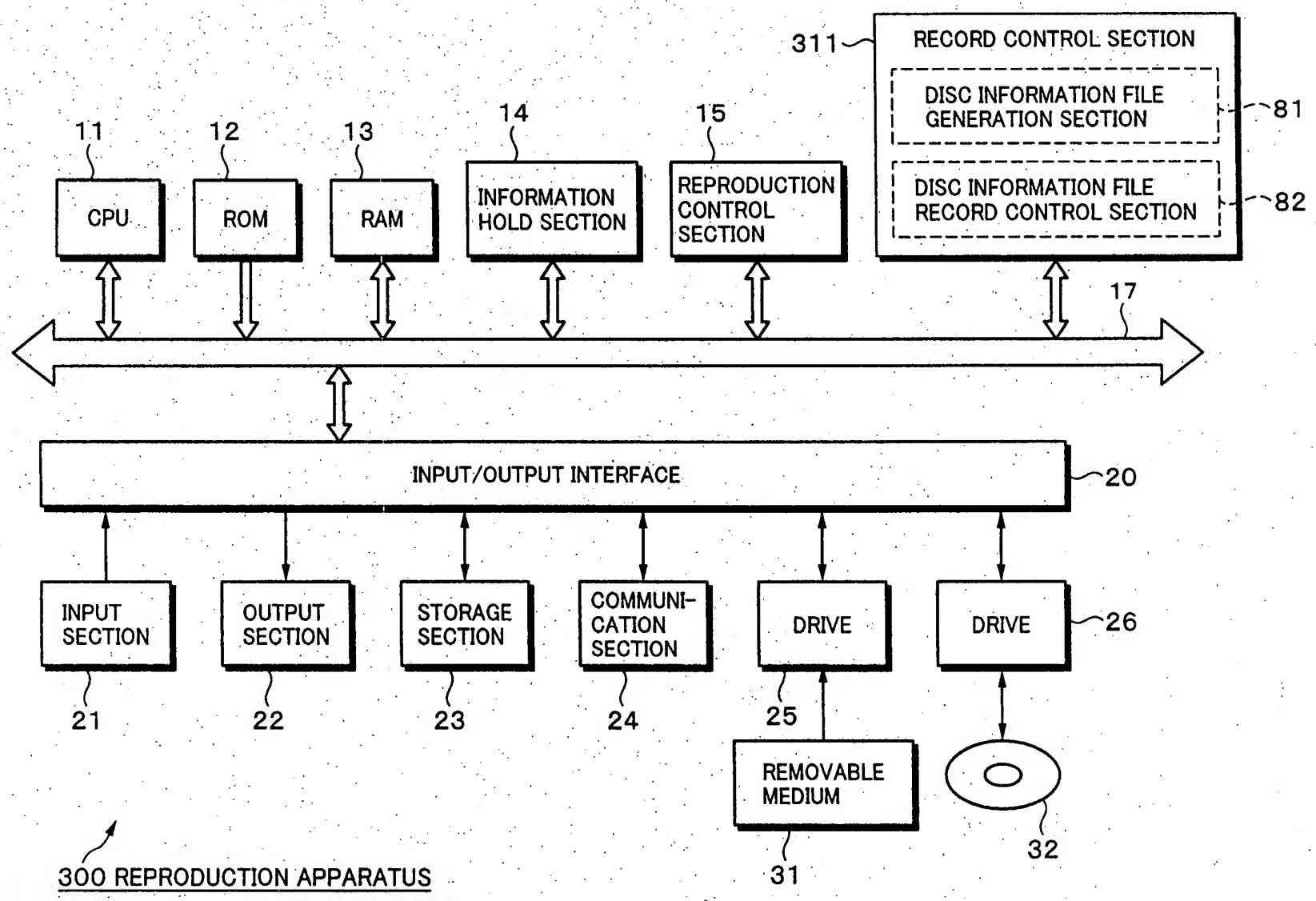
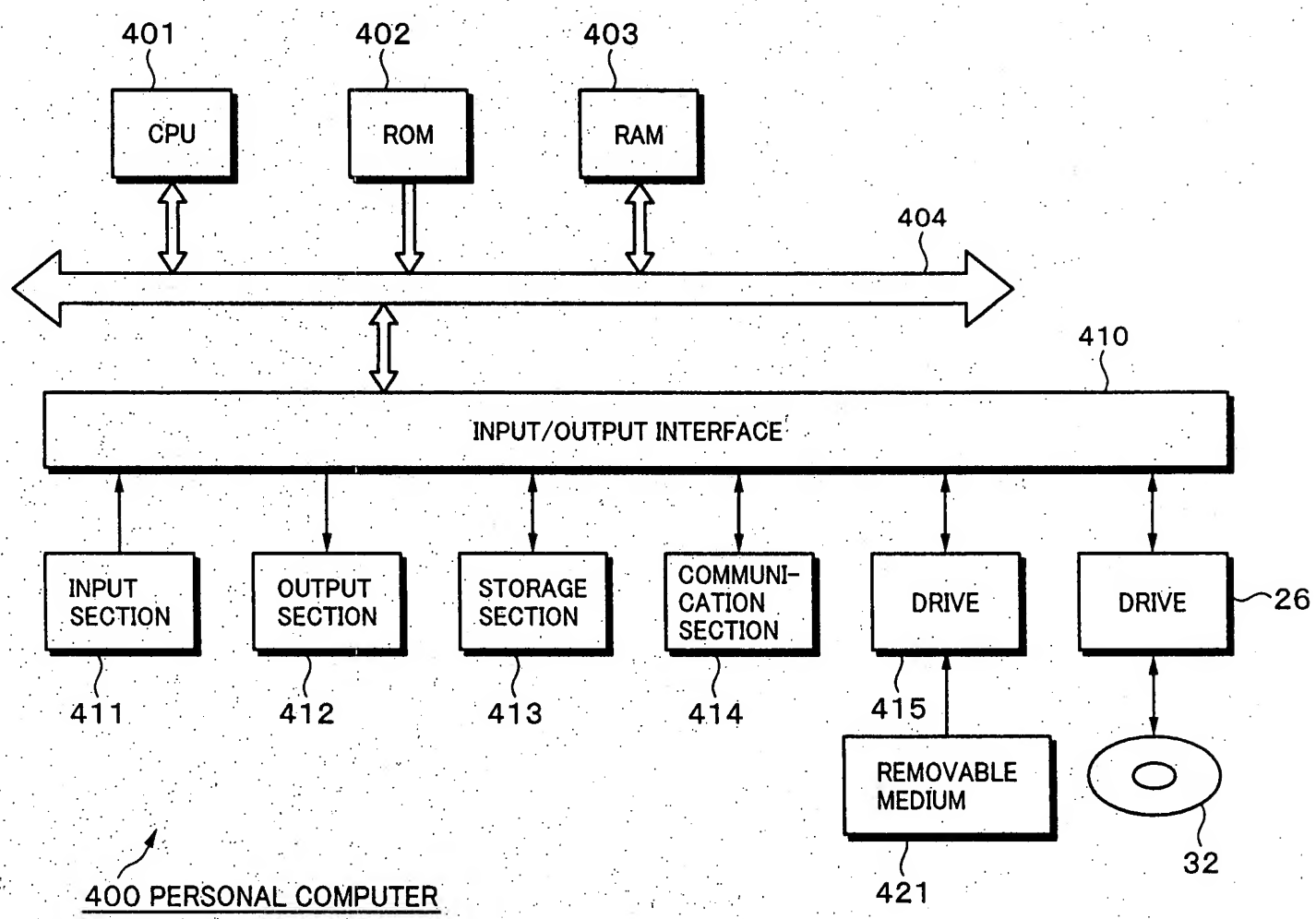

311
RECORD CONTROL SECTION
DISC INFORMATION FILE GENERATION SECTION
81
DISC INFORMATION FILE RECORD CONTROL SECTION
82
11
12
13
14
15
CPU
ROM
RAM
INFORMATION HOLD SECTION
REPRODUCTION CONTROL SECTION
17
INPUT/OUTPUT INTERFACE
20
INPUT SECTION
OUTPUT SECTION
STORAGE SECTION
COMMUNI-CATION SECTION
DRIVE
DRIVE
26
21
22
23
24
25
REMOVABLE MEDIUM
31
32
300 REPRODUCTION APPARATUS

Fig. 34


401
402
403
CPU
ROM
RAM
404
410
INPUT/OUTPUT INTERFACE
INPUT SECTION
OUTPUT SECTION
STORAGE SECTION
COMMUNI-CATION SECTION
DRIVE
DRIVE
26
411
412
413
414
415
REMOVABLE MEDIUM
32
421
400 PERSONAL COMPUTER

DESCRIPTION OF REFERENCE NUMERALS

1	RECORD AND REPRODUCTION APPARATUS
14	INFORMATION HOLD SECTION
15	REPRODUCTION CONTROL SECTION
16	RECORD CONTROL SECTION
32	DISC
51	INDEX FILE HOLD SECTION
52	DISC INFORMATION FILE HOLD SECTION
61	INDEX FILE READ SECTION
62	DISC INFORMATION FILE READ SECTION
63	DISC INFORMATION FILE MANAGEMENT SECTION
71	INDEX FILE GENERATION SECTION
72	INDEX FILE MANAGEMENT SECTION
73	INDEX FILE RECORD CONTROL SECTION
81	DISC INFORMATION FILE GENERATION SECTION
82	DISC INFORMATION FILE RECORD CONTROL SECTION
204	INDEX FILE
206	DISC INFORMATION FILE
300	REPRODUCTION APPARATUS
311	RECORD CONTROL SECTION
S11	PERFORM UDF FORMAT PROCESS.
S12	GENERATE PROAV ROOT DIRECTORY.
S13	GENERATE CLIP ROOT DIRECTORY.
S14	GENERATE EDIT ROOT DIRECTORY.
S15	GENERATE INDEX FILE.

S16 GENERATE DISC INFORMATION FILE.

S31 READ INDEX FILE.

S32 READ DISC INFORMATION FILE.

S51 GENERATE CLIP DIRECTORY.

S52 GENERATE CLIP INFORMATION FILE.

S53 GENERATE EACH FILE FOR EACH TYPE DATA THAT COMPOSE CLIP.

S54 ADD CLIP ELEMENT TO CLIP TABLE.

S55 RECORD INDEX FILE.

S71 REFERENCE ATTRIBUTE INFORMATION OF DIRECTORY.

S72 CAN CLIP BE UPDATED ?

S73 UPDATE EACH FILE OF CLIP.

S74 UPDATE CLIP INFORMATION FILE.

S75 UPDATE CLIP TABLE.

S76 RECORD INDEX FILE.

S77 PERFORM ERROR PROCESS.

S91 REFERENCE ATTRIBUTE INFORMATION OF DIRECTORY.

S92 CAN CLIP BE DELETED ?

S93 DELETE CLIP DIRECTORY.

S94 DELETE CLIP ELEMENT FROM CLIP TABLE.

S95 RECORD INDEX FILE.

S96 PERFORM ERROR PROCESS.

S111 GENERATE EDIT DIRECTORY.

S112 GENERATE EDIT LIST FILE.

S113 GENERATE EACH FILE THAT COMPOSES EDIT LIST.

S114 ADD EDIT LIST ELEMENT TO EDIT LIST TABLE.

S115 RECORD INDEX FILE.

S131 REFERENCE ATTRIBUTE INFORMATION OF DIRECTORY.

S132 CAN EDIT LIST BE UPDATED ?

S133 UPDATE EACH FILE OF EDIT LIST.

S134 UPDATE EDIT LIST FILE.

S135 UPDATE EDIT LIST TABLE.

S136 RECORD INDEX FILE.

S137 PERFORM ERROR PROCESS.

S151 REFERENCE ATTRIBUTE INFORMATION OF DIRECTORY.

S152 CAN EDIT LIST BE DELETED ?

S153 DELETE EDIT LIST DIRECTORY.

S154 DELETE EDIT LIST ELEMENT FROM EDIT LIST TABLE.

S155 RECORD INDEX FILE.

S156 PERFORM ERROR PROCESS.

S201 DOES REPRODUCTION HISTORY CONTAIN HISTORY RECORD OF TAPE-LIKE REPRODUCTION ?

S202 READ FRAME DESIGNATED IN REPRODUCTION HISTORY AS REPRODUCTION START FRAME.

S203 READ TOP FRAME OF FIRST CLIP AS REPRODUCTION START FRAME ACCORDING TO CLIP TABLE.

S204 HAS REPRODUCTION START POSITION CHANGE COMMAND BEEN ACCEPTED ?

S205 READ DESIGNATED FRAME AS REPRODUCTION START FRAME ACCORDING TO CLIP TABLE.

S206 IS PROCESS COMPLETED ?

S207 HAS REPRODUCTION START COMMAND BEEN ACCEPTED ?

S208 START REPRODUCTION FROM REPRODUCTION START FRAME ACCORDING TO CLIP TABLE.

S209 UPDATE DISC INFORMATION FILE.

S210 EXECUTE COMPLETION PROCESS.

S231 HAS REPRODUCTION STOP COMMAND BEEN ACCEPTED ?

S232 HAS CURRENT CLIP BEEN REPRODUCED ?

S233 IS THERE NEXT CLIP ?

S234 CAN CLIP BE REPRODUCED ?

S235 REPRODUCE DESIGNATED CLIP ACCORDING TO CLIP TABLE.

S236 STOP REPRODUCTION.

S237 READ TOP FRAME OF FIRST CLIP AS REPRODUCTION START FRAME ACCORDING TO CLIP TABLE.

S238 STOP REPRODUCTION.

S239 DESIGNATE STOP FRAME AS REPRODUCTION START FRAME.

S311 DOES REPRODUCTION HISTORY CONTAIN REPRODUCTION HISTORY RECORD OF EDIT LIST ?

S312 READ FRAME DESIGNATED IN REPRODUCTION HISTORY RECORD AS REPRODUCTION START FRAME.

S313 READ TOP FRAME OF FIRST CLIP AS REPRODUCTION START FRAME ACCORDING TO EDIT LIST.

S314 HAS REPRODUCTION START POSITION CHANGE COMMAND BEEN ACCEPTED ?

S315 READ DESIGNATED FRAME AS REPRODUCTION START FRAME ACCORDING TO EDIT LIST.

S316 IS PROCESS COMPLETED ?

S317 HAS REPRODUCTION START COMMAND BEEN ACCEPTED ?

S318 START REPRODUCTION FROM REPRODUCTION START FRAME ACCORDING TO EDIT LIST.

S319 UPDATE DISC INFORMATION FILE.

S320 EXECUTE COMPLETION PROCESS.

S341 HAS REPRODUCTION STOP COMMAND BEEN ACCEPTED ?

S342 HAS CURRENT CLIP BEEN REPRODUCED ?

S343 IS THERE NEXT CLIP ?

S344 CAN CLIP BE REPRODUCED ?

S345 REPRODUCE DESIGNATED CLIP ACCORDING TO EDIT LIST.

S346 STOP REPRODUCTION.

S347 READ TOP FRAME OF FIRST CLIP AS REPRODUCTION START FRAME ACCORDING TO EDIT LIST.

S348 STOP REPRODUCTION.

S349 DESIGNATE STOP FRAME AS REPRODUCTION START FRAME.

S371 DOES REPRODUCTION HISTORY CONTAIN REPRODUCTION HISTORY RECORD OF CLIP TO BE REPRODUCED ?

S372 READ FRAME DESIGNATED IN REPRODUCTION HISTORY AS REPRODUCTION START FRAME.

S373 READ TOP FRAME AS REPRODUCTION START FRAME ACCORDING TO CLIP INFORMATION FILE.

S374 HAS REPRODUCTION START POSITION CHANGE COMMAND BEEN ACCEPTED ?

S375 READ DESIGNATED FRAME AS REPRODUCTION START FRAME ACCORDING TO CLIP INFORMATION FILE.

S376 IS PROCESS COMPLETED ?

S377 HAS REPRODUCTION START COMMAND BEEN ACCEPTED ?

S378 START REPRODUCTION FROM REPRODUCTION START FRAME ACCORDING TO CLIP INFORMATION FILE.

S379 UPDATE DISC INFORMATION FILE.

S380 EXECUTE COMPLETION PROCESS.

S401 HAS REPRODUCTION STOP COMMAND BEEN ACCEPTED ?

S402 HAS CLIP BEEN REPRODUCED ?

S403 STOP REPRODUCTION.

S404 READ TOP FRAME AS REPRODUCTION START FRAME.

S405 STOP REPRODUCTION.

S406 DESIGNATE STOP FRAME AS REPRODUCTION START FRAME.

S421 TAKE-LIKE REPRODUCTION ?

S422 GENERATE HISTORY RECORD OF TAKE-LIKE REPRODUCTION.

S423 DOES CURRENT REPRODUCTION HISTORY CONTAIN HISTORY RECORD OF TAKE-LIKE REPRODUCTION ?

S424 DELETE OLD HISTORY RECORD OF TAKE-LIKE REPRODUCTION AND REGISTER GENERATED HISTORY RECORD OF TAKE-LIKE REPRODUCTION AT POSITION OF NEWEST HISTORY RECORD.

S425 DELETE OLDEST HISTORY RECORD OF REPRODUCTION HISTORY AND REGISTER GENERATED HISTORY RECORD OF TAKE-LIKE REPRODUCTION AT POSITION OF NEWEST HISTORY RECORD.

S426 EDIT LIST DESIGNATION REPRODUCTION ?

S427 GENERATE HISTORY RECORD OF EDIT LIST DESIGNATION REPRODUCTION.

S428 DOES CURRENT REPRODUCTION HISTORY CONTAIN HISTORY RECORD OF EDIT LIST DESIGNATION REPRODUCTION FOR SAME EDIT LIST.

S429 DELETE OLD HISTORY RECORD OF EDIT LIST DESIGNATION REPRODUCTION

AND REGISTER GENERATED HISTORY RECORD OF EDIT LIST DESIGNATION REPRODUCTION AT POSITION OF NEWEST HISTORY RECORD.

S430 DELETE OLDEST HISTORY RECORD OF REPRODUCTION HISTORY AND REGISTER GENERATED HISTORY RECORD OF EDIT LIST REPRODUCTION AT POSITION OF NEWEST HISTORY RECORD.

S451 CLIP DESIGNATION REPRODUCTION ?

S452 GENERATE HISTORY RECORD OF CLIP DESIGNATION REPRODUCTION.

S453 DOES CURRENT REPRODUCTION HISTORY CONTAIN HISTORY RECORD OF CLIP DESIGNATION REPRODUCTION FOR SAME CLIP ?

S454 DELETE OLD HISTORY RECORD OF CLIP DESIGNATION REPRODUCTION AND REGISTER GENERATED HISTORY RECORD OF CLIP DESIGNATION REPRODUCTION AT POSITION OF NEWEST HISTORY RECORD.

S455 DELETE OLDEST HISTORY RECORD OF REPRODUCTION HISTORY AND REGISTER GENERATED HISTORY RECORD OF CLIP DESIGNATION REPRODUCTION AT POSITION OF NEWEST HISTORY RECORD.

S456 RECORD DISC INFORMATION FILE.